PIONEER®
The Art of Entertainment

Service Manual

ORDER NO.
RRV1970

SPEAKER SYSTEM

HTV-SW2 KUCXC

- **This product is component of system.**
  For the operating instructions, refer to the service manual RRV1978 for HTV-C2.

65S

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.

Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.

Health & Safety Code Section 25249.6 – Proposition 65

FOR PRECAUTION OF REASSEMBLY AND DISASSEMBLY

- The woofer is attached to the baffle by 4 external screws. To detach it, unfasten those screws. When attaching it, face its terminal backward.
- The Amp is attached to the back board by 9 external screws. To detach it, unfasten those screws and pull straight it toward back. To detach it, first remove connector on bottom side. Then remove it.

PIONEER ELECTRONIC CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153-8654, Japan
PIONEER ELECTRONICS SERVICE, INC. P.O. Box 1760, Long Beach, CA 90801-1760, U.S.A.
PIONEER ELECTRONIC (EUROPE) N.V. Haven 1087, Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE. LTD. 501 Orchard Road, #10-00 Wheelock Place, Singapore 238880
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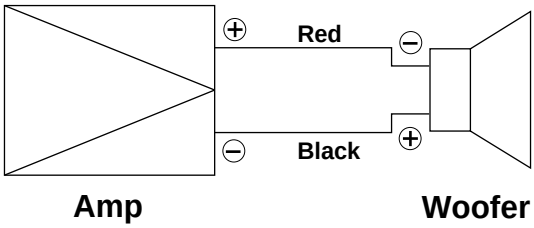
PARTS LIST

NOTES: ● *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
● *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*

Mark	No.	Description	Part No.
NSP		Cabinet	254940
NSP		AMP	HTV-A2/KUCXJ
		Logo 56	255601
		Connecting Cord	254915
NSP		Absorbent	254886
		Foot	255116
NSP		Plastic Port Tube 48	258368
NSP		Coded Label	244126
NSP		Warning Label	257850
		Speaker (Woofer)	254960
		Screw (for Woofer and Amp)	222016
		Bind Tapping Screw (for Foot)	222539

SCHEMATIC DIAGRAM



PIONEER®
The Art of Entertainment

Service Manual

ORDER NO.
RRV1978

CONTROL CENTER
HTV-C2

● Refer to the service manual RRV1960 for HTV-C1/AUXJ.

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model	Power Requirement	Remarks
	HTV-C2		
AUXJ	O	AC26V power supplied from other system component	
ACXJ	O	AC26V power supplied from other system component	

- **This product is a system component.**
  For the system composition, refer to the service manual RRV1979 for HTV-A2/KUCXJ.
- **This product does not operate normally by itself. Please connect it to the AMPLIFIER HTV-A2/KUCXJ, for adjustment and operation inspection. Otherwise damage may result.**

Hometheater System
HTV-2
(service manual RRV1977)

- **Control Center**
  (This manual)
- **Powered Subwoofer**
  HTV-SW2 (service manual RRV1970)
  - **Amplifier**
    HTV-A2 (service manual RRV1979)

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1. CONTRAST OF MISCELLANEOUS PARTS

NOTES :
- *Parts marked by " NSP " are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing,be sure to use parts of identical designation.*
- *Reference Nos. indicate the pages and Nos. in the service manual for the base model.*
- *Screw adjacent to ▼ mark on the product are used for disassembly.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 *When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).*

560 Ω → 56 × 10 [1] → 561 ..... RD1/4PU 5 6 1 J

47k Ω → 47 × 10 [3] → 473 ..... RD1/4PU 4 7 3 J

0.5 Ω → R50 ..... RN2H R 5 0 K

1 Ω → 1R0 ..... RS1P 1 R 0 K

Ex. 2 *When there are 3 effective digits (such as in high precision metal film resistors).*

5.62k Ω → 562 × 10 [1] → 5621 ..... RN1/4PC 5 6 2 1 F

■ CONTRAST TABLE

HTV-C2/AUXJ, ACXJ and HTV-C1/AUXJ are constructed the same except for the following :

Ref. No.	Mark	Symbol and Description	Part No.			Remarks
			HTV-C1	HTV-C2		
			AUXJ	AUXJ	ACXJ	
		PACKING				
P3-8		Operating Instructions (French)	Not used	Not used	ARC7200	
P3-10	NSP	Warranty Card	ARY1051	ARY1051	ARY1075	
P3-11		Remote Control Unit (CU-HTV001)	AZN7713	Not used	Not used	
P3-12	NSP	Remoto Control Unit (CU-HTV001)	AXD7157	Not used	Not used	
P3-12	NSP	Remoto Control Unit (CU-HTV002)	Not used	AXD7160	AXD7160	
P3-13		Battery Cover	RZN1156	AZN2256	AZN2256	
P3-15	NSP	Dry Cell battery (R6P, AA)	VEM-013	Not used	Not used	
P3-15	NSP	Alkali Ne Battery (LR03, AAA)	Not used	AEX1006	AEX1006	
P3-21		Packing Case	AHD7574	AHD7590	AHD7590	
		EXTERIOR				
P5-8		Rear Panel	ANC7655	ANC7661	ANC7661	

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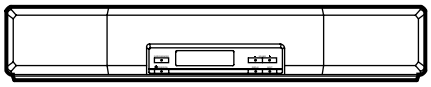
The Art of Entertainment

Service Manual



ORDER NO.
RRV1960

CONTROL CENTER
HTV-C1

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model	Power Requirement	Remarks
	HTV-C1		
AUXJ	◯	AC26V power supplied from other system component	
ACXJ	◯	AC26V power supplied from other system component	

- **This product is a system component.**
  For the system composition, refer to the service manual RRV1957 for HTV-A1/KUCXJ.
- **This product does not operate normally by itself. Please connect it to the AMPLIFIER HTV-A1/KUCXJ, for adjustment and operation inspection. Otherwise damage may result.**

Hometheater System
HTV-1
(service manual RRV1968)

- **Control Center**
  (This manual)
- **Powered Subwoofer**
  HTV-SW1 (service manual RRV1969)
  - **Amplifier**
    HTV-A1 (service manual RRV1957)

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1. SAFETY INFORMATION

This service manual is intended for qualified service technicians ; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING
Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5).
When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

NOTICE
(FOR CANADIAN MODEL ONLY)
Fuse symbols (fast operating fuse) and/or (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE
(POUR MODÈLE CANADIEN SEULEMENT)
Les symboles de fusible (fusible de type rapide) et/ou (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

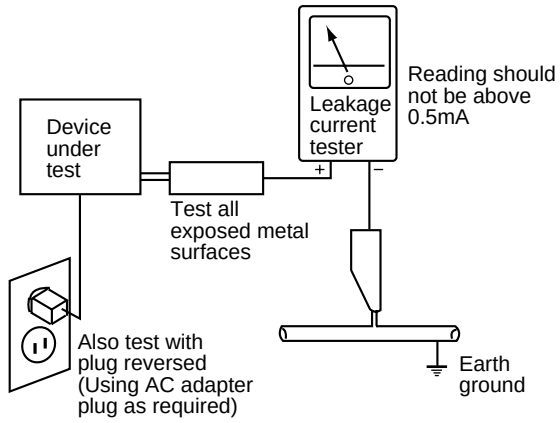
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.


Reading should not be above 0.5mA
Leakage current tester
+
–
Device under test
Test all exposed metal surfaces
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.

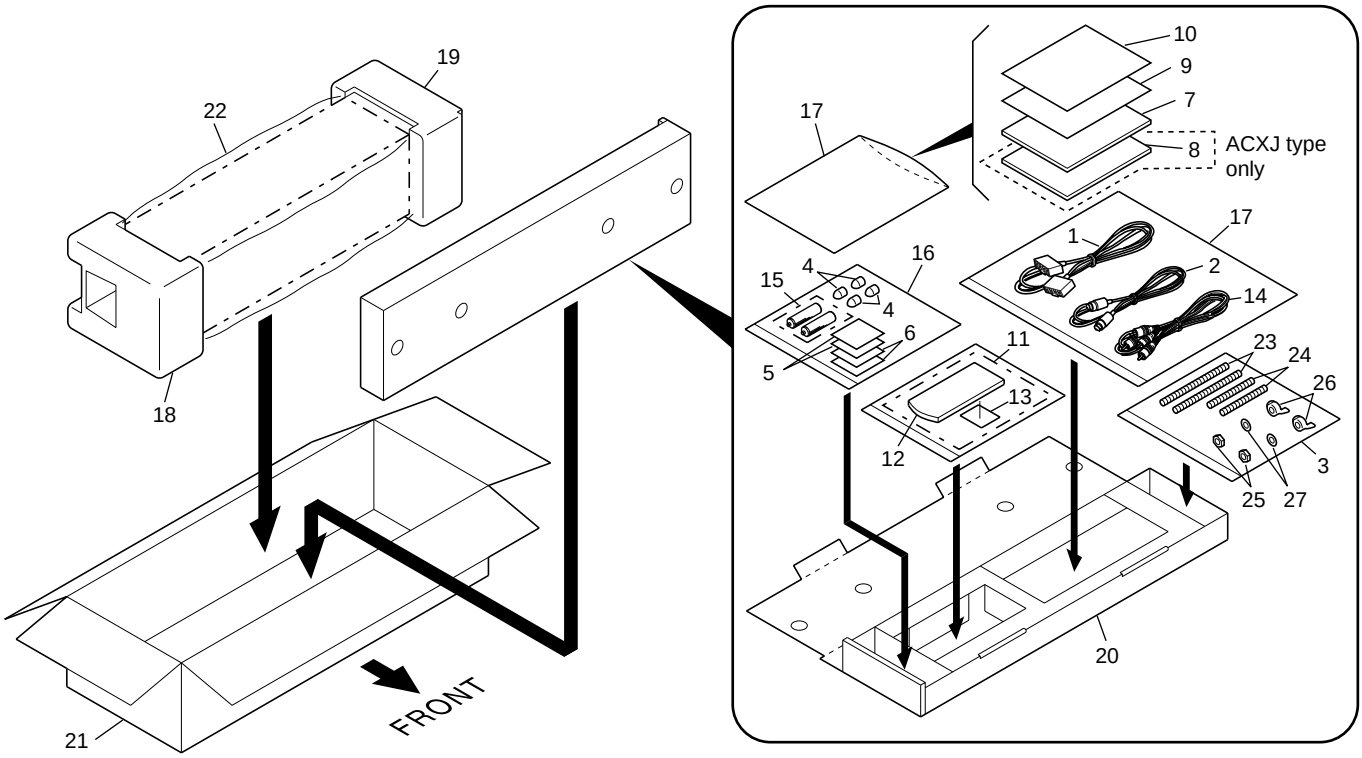
The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

2. EXPLODED VIEWS AND PARTS LIST

NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Screws adjacent to ▼ mark on the product are used for disassembly.*

2.1 PACKING



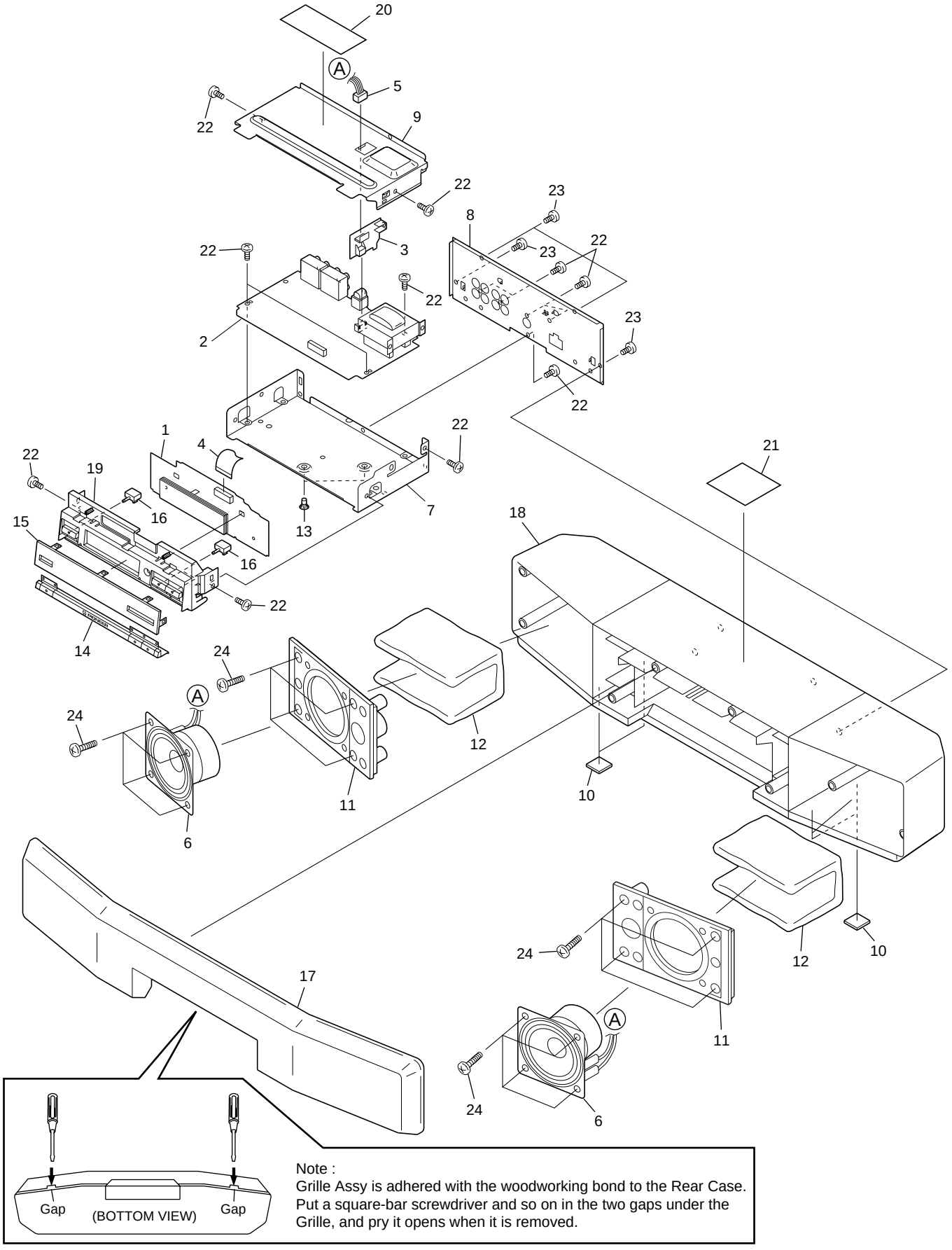
(1) PACKING PARTS LIST

Mark	No.	Description	Part No.
	1	System Cable A (L=3.0m)	ADX7239
	2	System Cable B (L=3.0m)	ADE7023
NSP	3	MOUNT Kit	AEA7021
	4	Bolt Cap	AEB7111
	5	Velcro Tape (hook)	AED7028
	6	Velcro Tape (loop)	AED7029
	7	Operating Instructions (English)	ARB7147
	8	Operating Instructions (French)	See Contrast table (2)
	9	Quick Instructions Guide	ARH7036
NSP	10	Warranty Card	See Contrast table (2)
	11	Remote Control Unit (CU-HTV001)	AZN7713
NSP	12	Remote Control Unit (CU-HTV001)	AXD7157
	13	Battery Cover	RZN1156
	14	Audio Cord (L=1.5m)	VDE1033
NSP	15	Dry Cell Battery (R6P,AA)	VEM-013
NSP	16	Polyethylene Bag	Z21-033
	17	Polyethylene Bag (0.03 × 230 × 340)	Z21-038
	18	L Protector	AHA7209
	19	R Protector	AHA7210
	20	Paper Protector	AHA7217
	21	Packing Case	AHD7574
	22	Packing Sheet	AHG7053
	23	Bolt (L)	ABA7042
	24	Bolt (S)	ABA7041
	25	Nut	NA60FZK
	26	Wing Nut	NR60FZK
	27	Washer	WB60FZK

(2) CONTRAST TABLE

Mark	No.	Symbol and Description	Part No.		Remarks
			AUXJ Type	ACXJ Type	
	8	Operating Instructions (French)	Not used	ARC7200	
NSP	10	Warranty Card	ARY1051	ARY1075	

2.2 MAIN SECTION



Note :
Grille Assy is adhered with the woodworking bond to the Rear Case. Put a square-bar screwdriver and so on in the two gaps under the Grille, and pry it opens when it is removed.

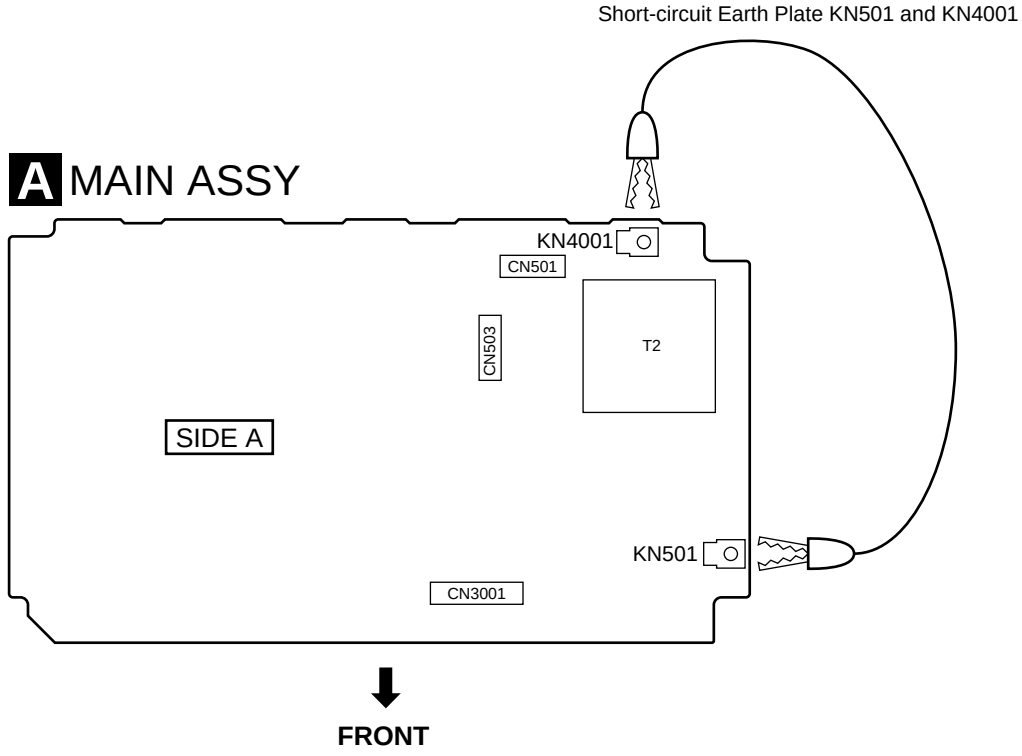
● MAIN SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	DISPLAY Assy	AWU7070
	2	MAIN Assy	AWU7071
	3	TERMINAL Assy	AWU7072
	4	19P FFC/30V	ADD7092
	5	Cable Assy 4P	ADX7240
	6	Speaker	D87DU61-51F
NSP	7	PCB Bracket	ANA7068
	8	Rear Panel	ANC7655
NSP	9	Shield Cover	ANK7040
	10	Cushion 3	AEB7110
NSP	11	Baffle	AMD7004
NSP	12	Acoustic Absorbent	AMT7001
	13	Card Spacer	DNK2769
	14	Button	AAD7454
	15	Display Panel	AAK7550
	16	Lens	AAK7551
	17	Grille Assy	AAS7001
NSP	18	Rear Case	AMC7025
	19	Sub Panel	AMD7003
NSP	20	Fuse Caution Label	AAX7645
NSP	21	Founding Caution	AAX7649
	22	Screw	BBZ30P080FMC
	23	Screw	VPZ30P080FMC
	24	Screw	BPZ40P140FZK

NOTE :

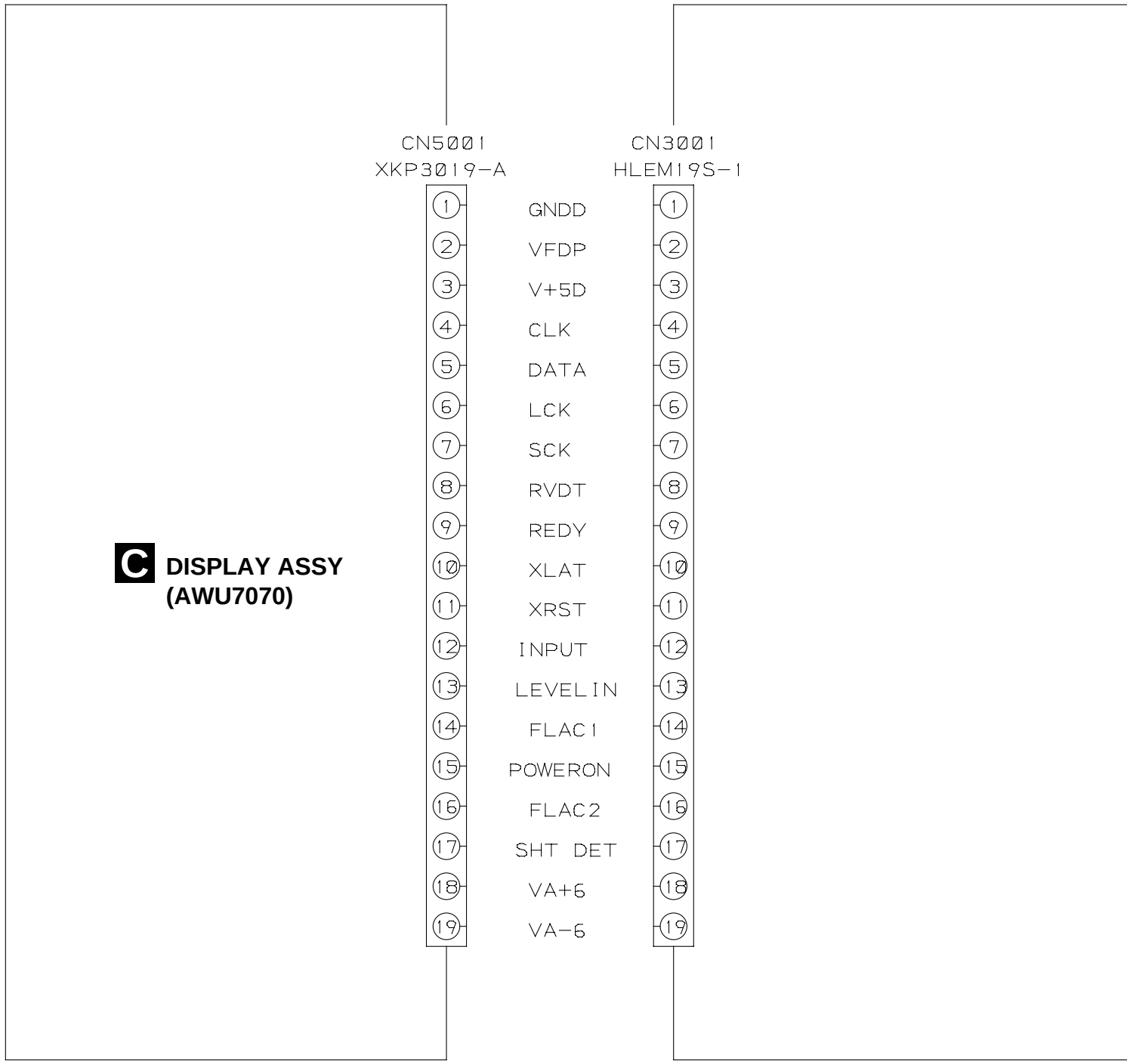
• The attention points when remove the MAIN Assy from the chassis and diagnose it

It doesn't move when Earth Plates KN501 and KN4001 aren't connected.
When you remove the MAIN Assy from the chassis and diagnose it, short-circuit Earth Plate KN501 and KN4001 and diagnose it.

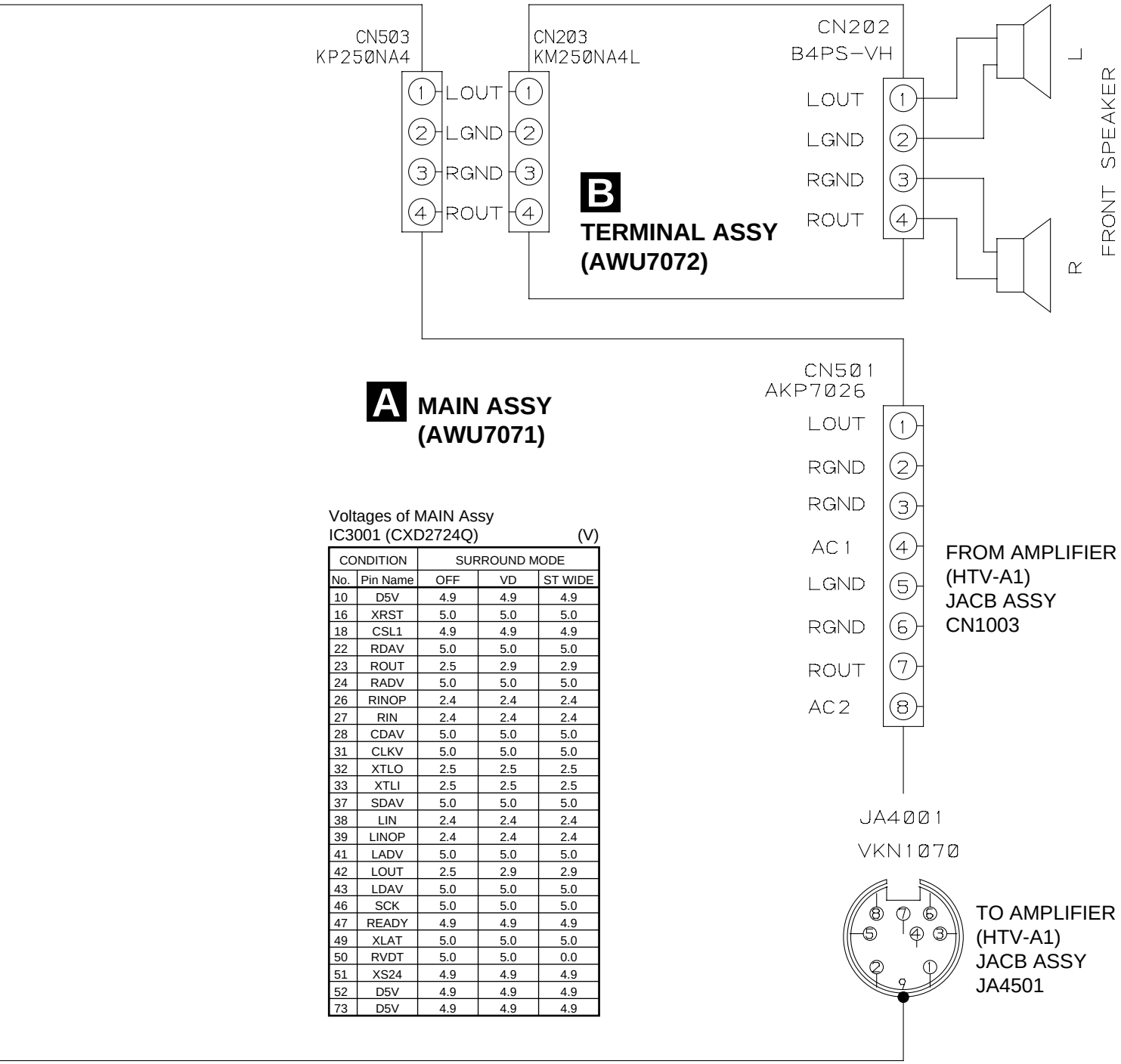


3. SCHEMATIC DIAGRAM

3.1 OVERALL WIRING DIAGRAM



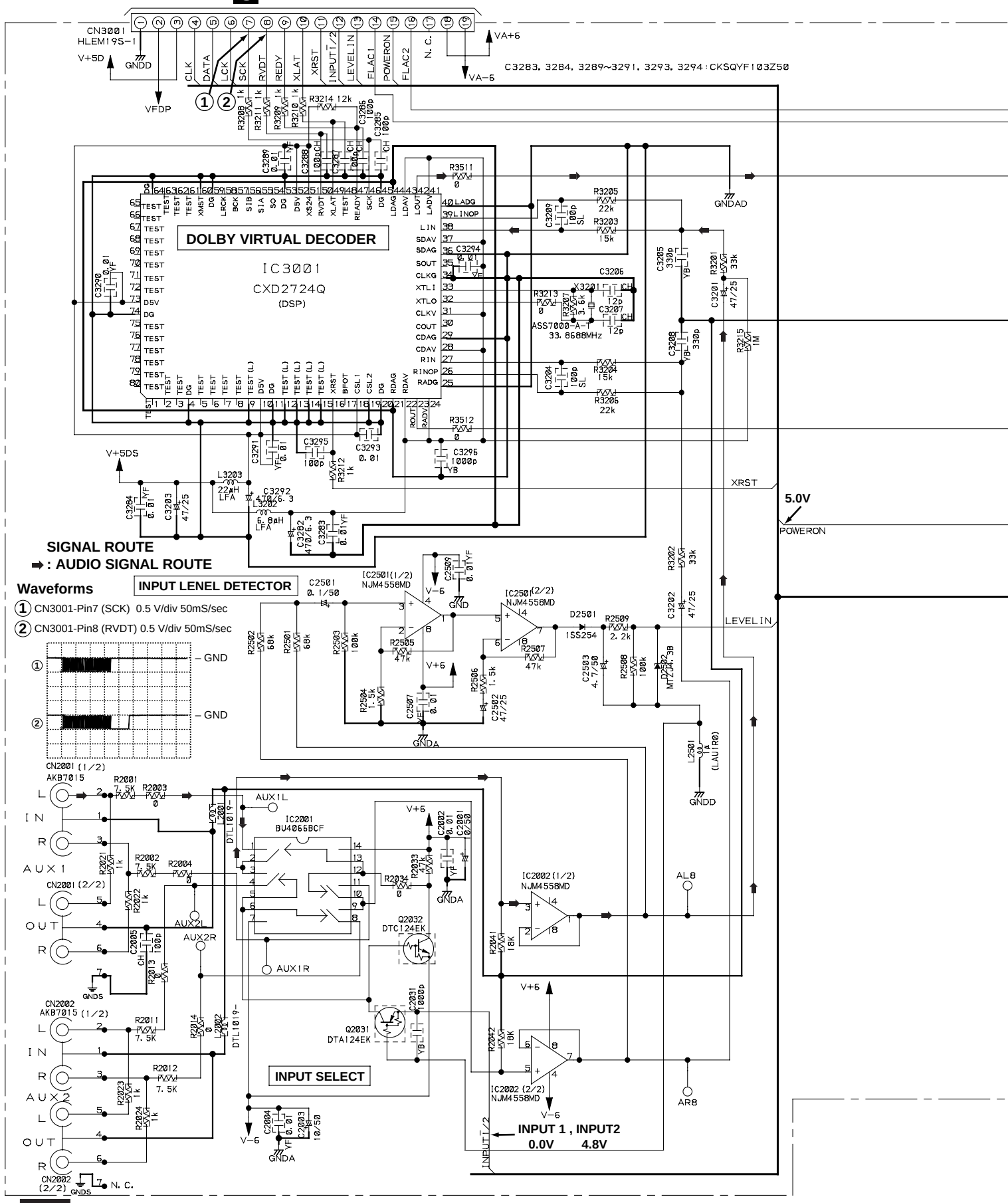
Note : When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST".

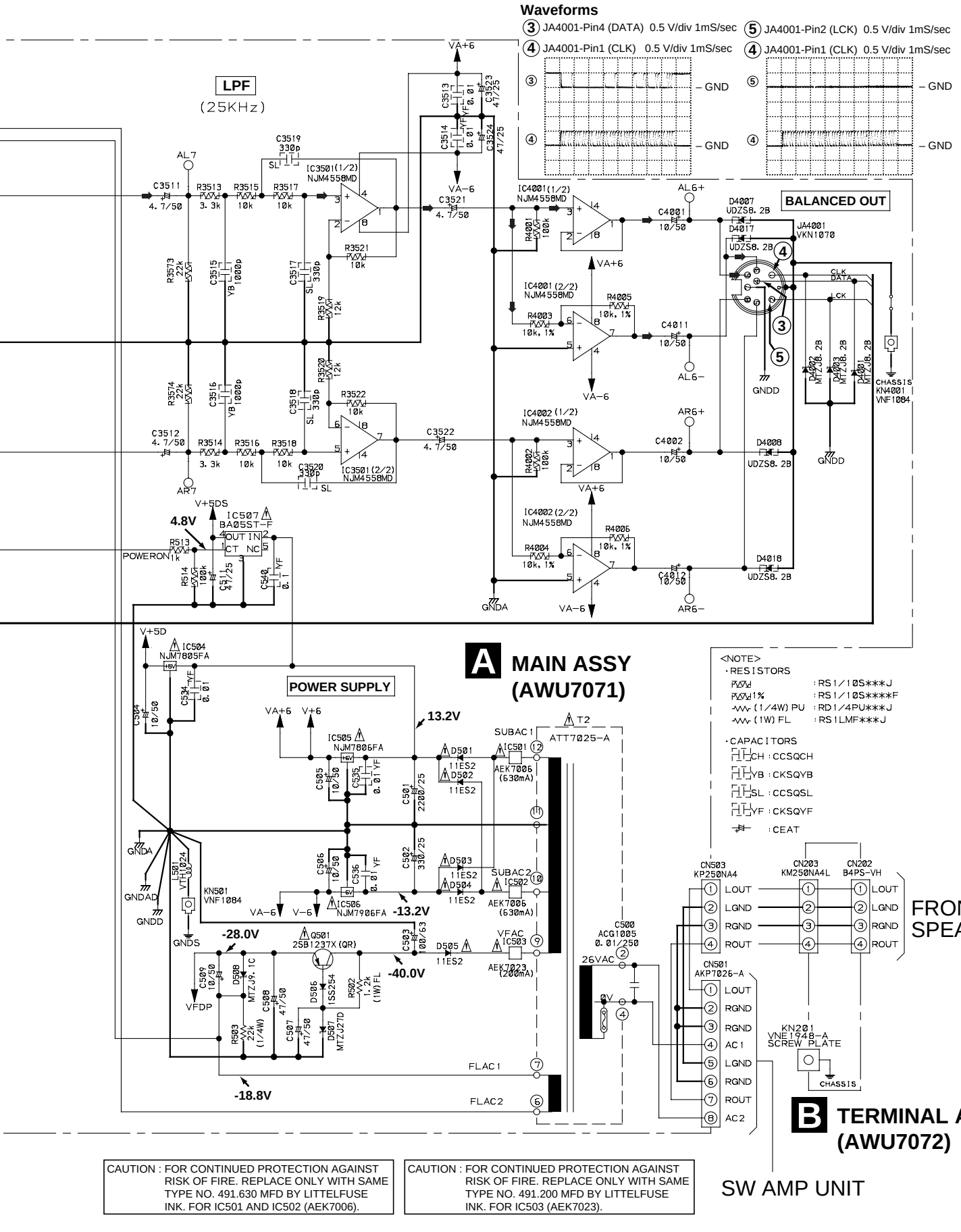


Voltages of MAIN Assy
IC3001 (CXD2724Q) (V)

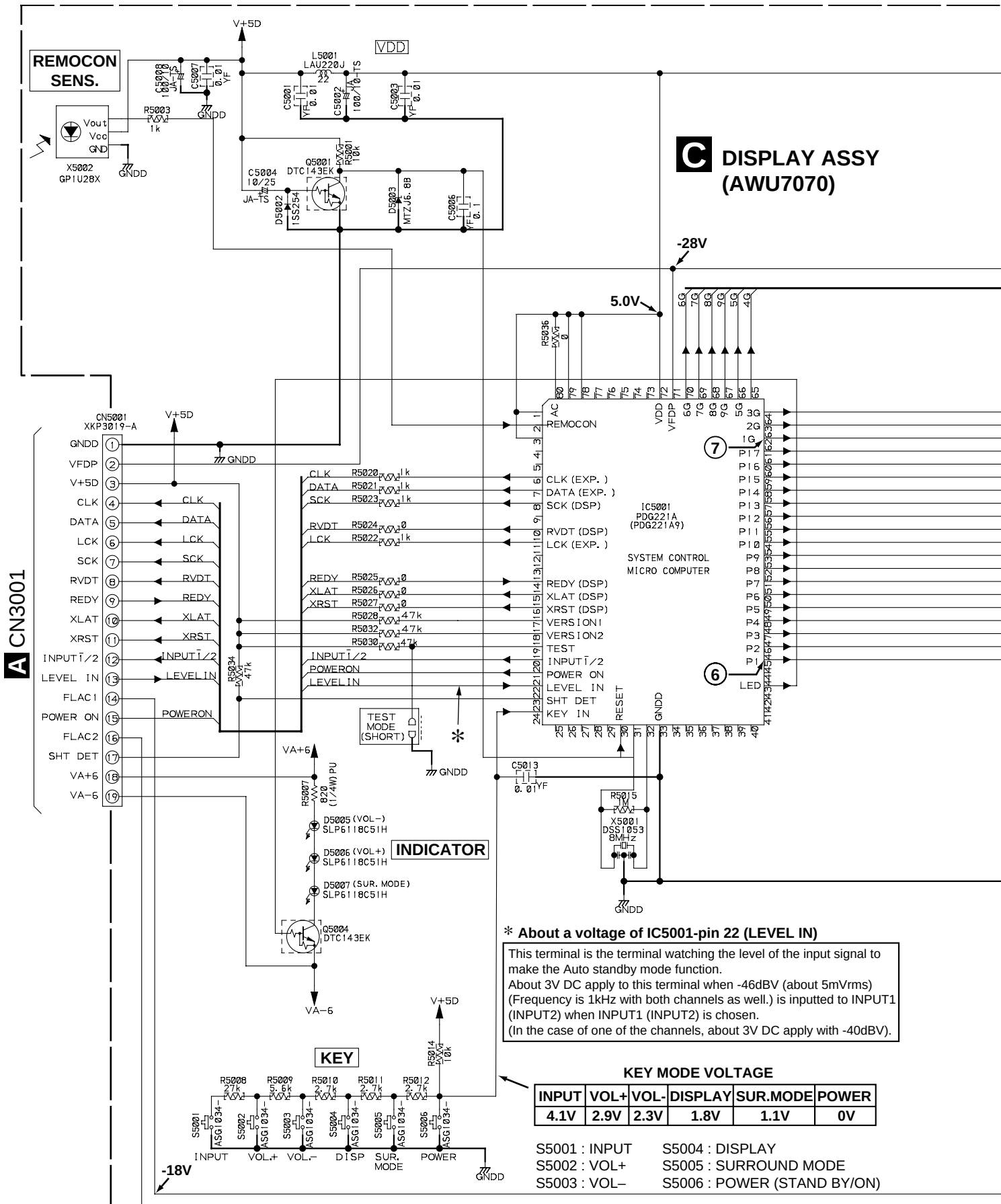
CONDITION		SURROUND MODE		
No.	Pin Name	OFF	VD	ST WIDE
10	D5V	4.9	4.9	4.9
16	XRST	5.0	5.0	5.0
18	CSL1	4.9	4.9	4.9
22	RDAV	5.0	5.0	5.0
23	ROUT	2.5	2.9	2.9
24	RADV	5.0	5.0	5.0
26	RINOP	2.4	2.4	2.4
27	RIN	2.4	2.4	2.4
28	CDAV	5.0	5.0	5.0
31	CLKV	5.0	5.0	5.0
32	XTLO	2.5	2.5	2.5
33	XTLI	2.5	2.5	2.5
37	SDAV	5.0	5.0	5.0
38	LIN	2.4	2.4	2.4
39	LINOP	2.4	2.4	2.4
41	LADV	5.0	5.0	5.0
42	LOUT	2.5	2.9	2.9
43	LDAV	5.0	5.0	5.0
46	SCK	5.0	5.0	5.0
47	READY	4.9	4.9	4.9
49	XLAT	5.0	5.0	5.0
50	RVDT	5.0	5.0	0.0
51	XS24	4.9	4.9	4.9
52	D5V	4.9	4.9	4.9
73	D5V	4.9	4.9	4.9

3.2 MAIN AND TERMINAL ASSEMBLIES




Waveforms
3 JA4001-Pin4 (DATA) 0.5 V/div 1mS/sec
4 JA4001-Pin1 (CLK) 0.5 V/div 1mS/sec
5 JA4001-Pin2 (LCK) 0.5 V/div 1mS/sec
4 JA4001-Pin1 (CLK) 0.5 V/div 1mS/sec
– GND
LPF
(25KHz)
BALANCED OUT
A MAIN ASSY (AWU7071)
POWER SUPPLY
B TERMINAL ASSY (AWU7072)
FRONT SPEAKER
SW AMP UNIT
<NOTE>
·RESISTORS
·CAPACITORS
CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 491.630 MFD BY LITTELFUSE INK. FOR IC501 AND IC502 (AEK7006).
CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 491.200 MFD BY LITTELFUSE INK. FOR IC503 (AEK7023).

3.3 DISPLAY ASSY



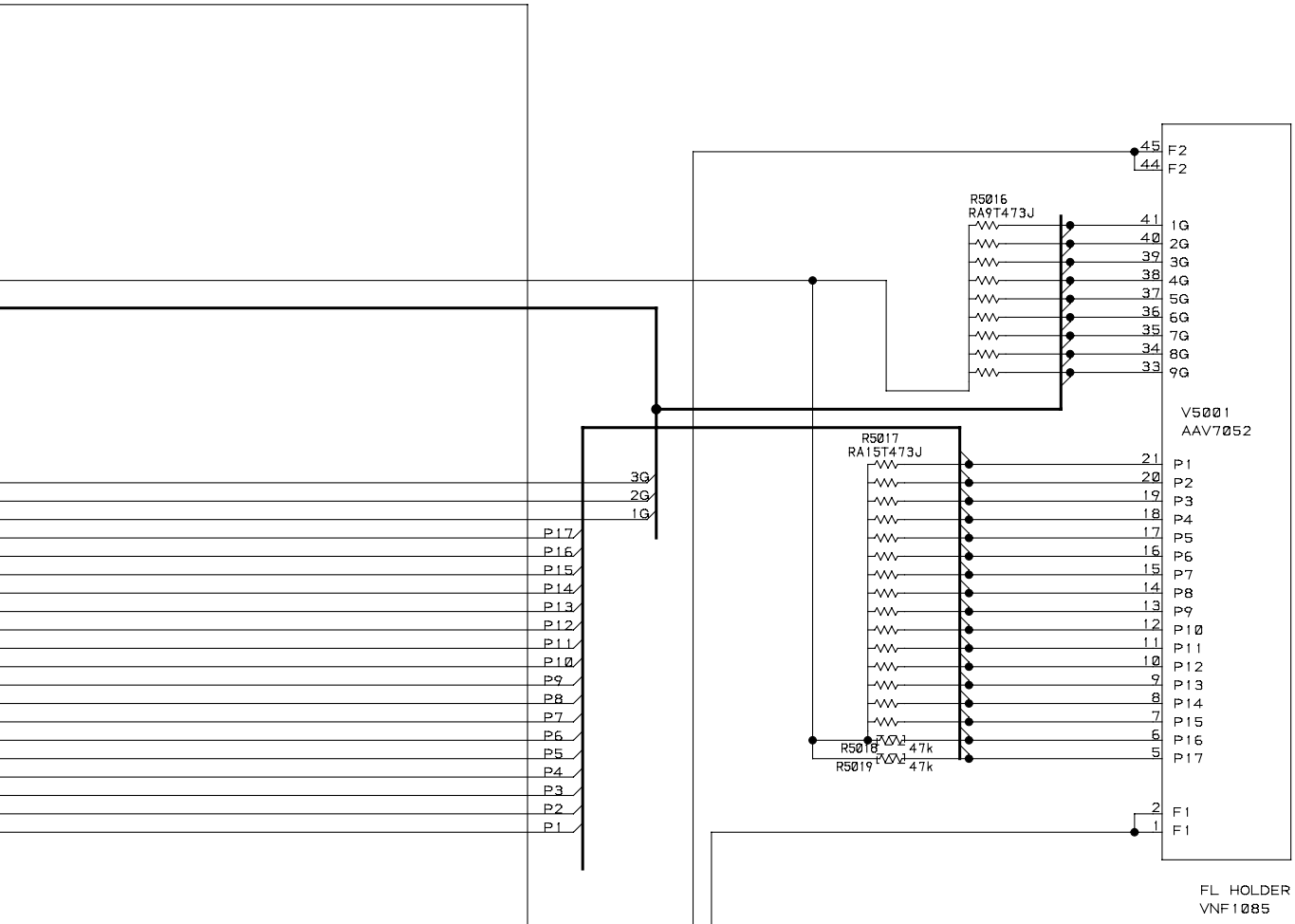
* **About a voltage of IC5001-pin 22 (LEVEL IN)**

This terminal is the terminal watching the level of the input signal to make the Auto standby mode function.
About 3V DC apply to this terminal when -46dBV (about 5mVrms) (Frequency is 1kHz with both channels as well.) is inputted to INPUT1 (INPUT2) when INPUT1 (INPUT2) is chosen.
(In the case of one of the channels, about 3V DC apply with -40dBV).

KEY MODE VOLTAGE

INPUT	VOL+	VOL-	DISPLAY	SUR.MODE	POWER
4.1V	2.9V	2.3V	1.8V	1.1V	0V

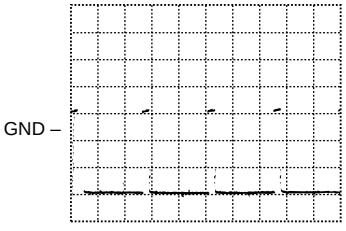
S5001 : INPUT
S5002 : VOL+
S5003 : VOL–
S5004 : DISPLAY
S5005 : SURROUND MODE
S5006 : POWER (STAND BY/ON)



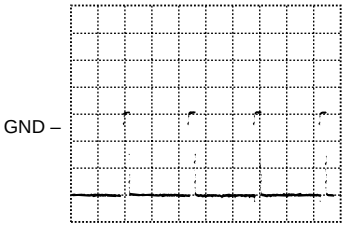
<NOTE>
·RESISTORS
: RS1/10S***J
: RD1/4PU***J
·CAPACITORS
: CKSQYF
: CKSQYB
: CCSQCH
: CCSQSL
: CEJA

Waveforms

6 IC5001-Pin45 (P1) 1V/div 2mS/sec



7 IC5001-Pin62 (1G) 1V/div 2mS/sec



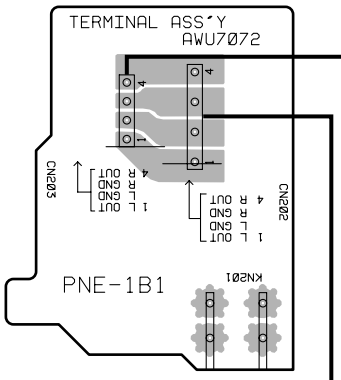
4. PCB CONNECTION DIAGRAM

4.1 MAIN, TERMINAL AND DISPLAY ASSEMBLIES

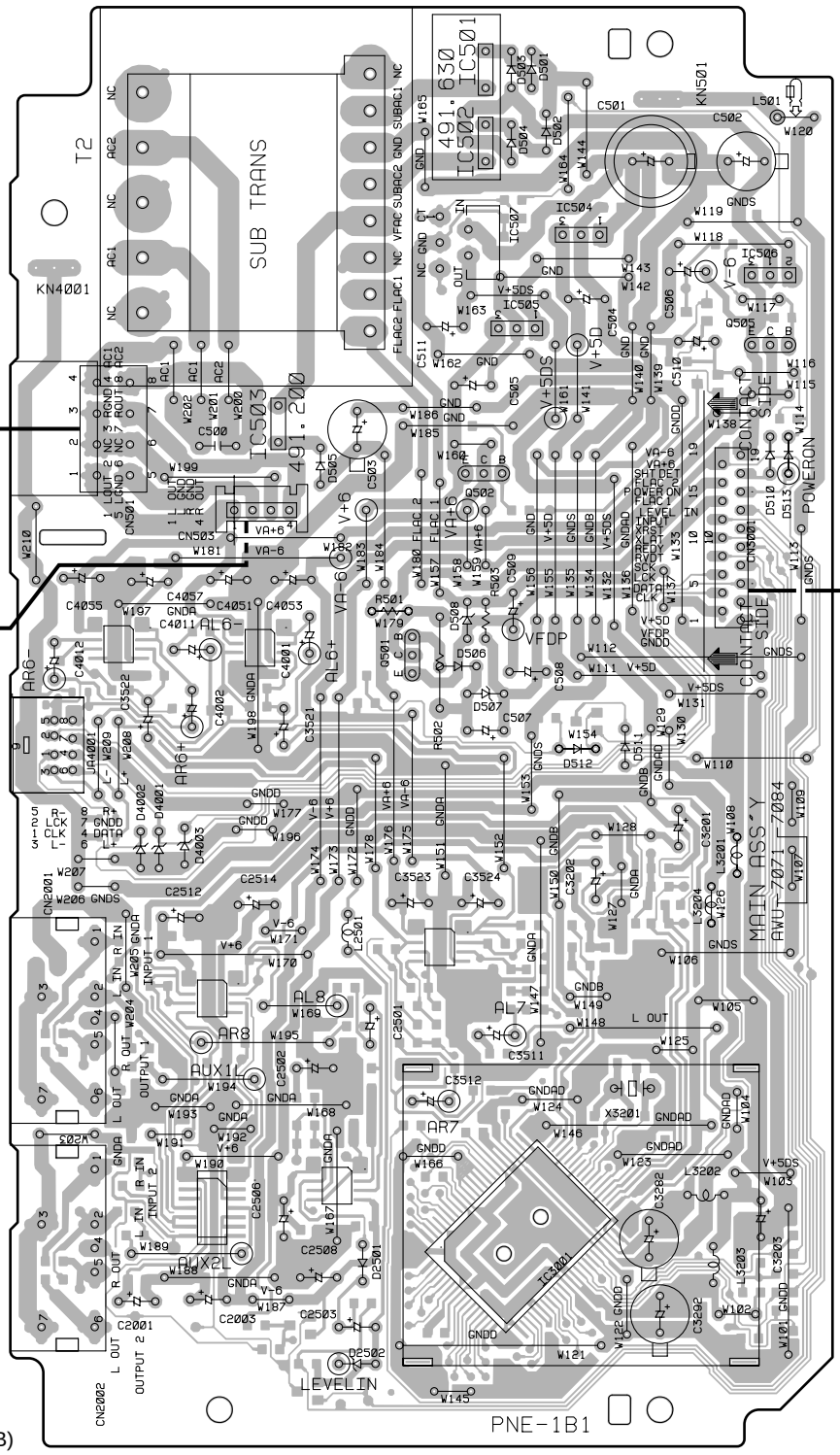
A MAIN ASSY

SW AMP UNIT

B TERMINAL ASSY



FRONT SPEAKER



(ANP7252-B)

IC501–IC503 Q501 Q502 IC504–IC507 Q505

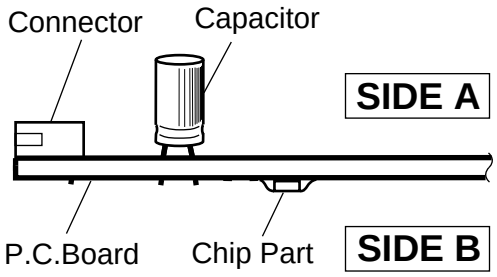
SIDE A

NOTE FOR PCB DIAGRAMS :

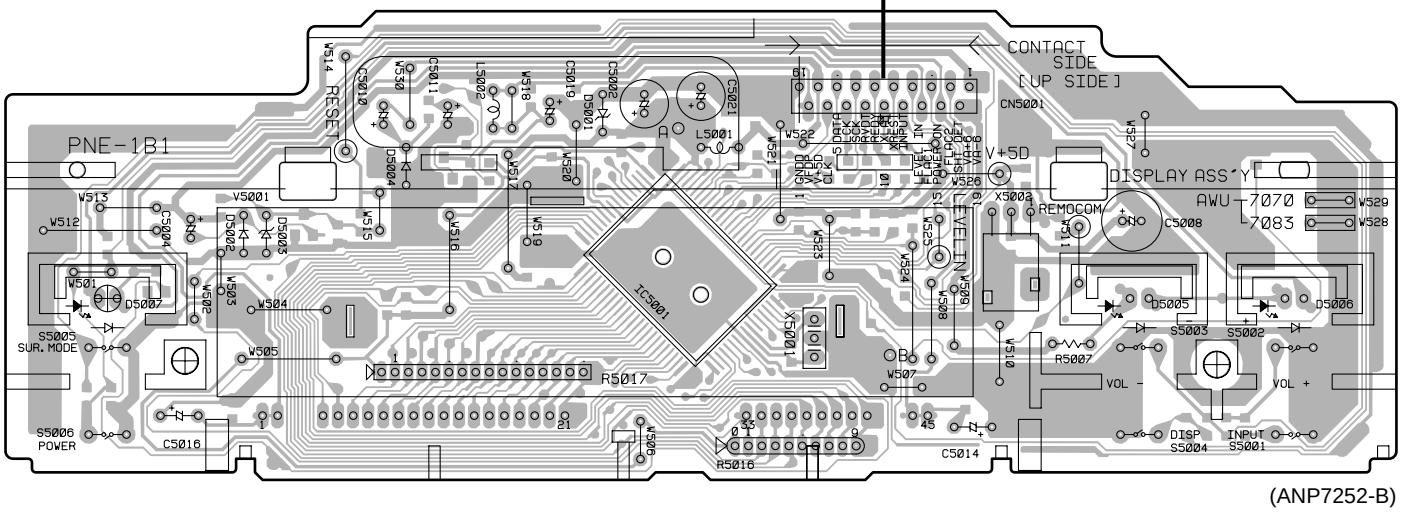
1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol In PCB Diagrams	Symbol In Schematic Diagrams	Part Name
B C E	B C E B C E	Transistor
B C E	B C E B C E	Transistor with resistor
D G S	D G S D G S	Field effect transistor
		Resistor array
		3-terminal regulator

3. The parts mounted on this PCB include all necessary parts for several destinations.
   For further information for respective destinations, be sure to check with the schematic diagram.
4. View point of PCB diagrams.



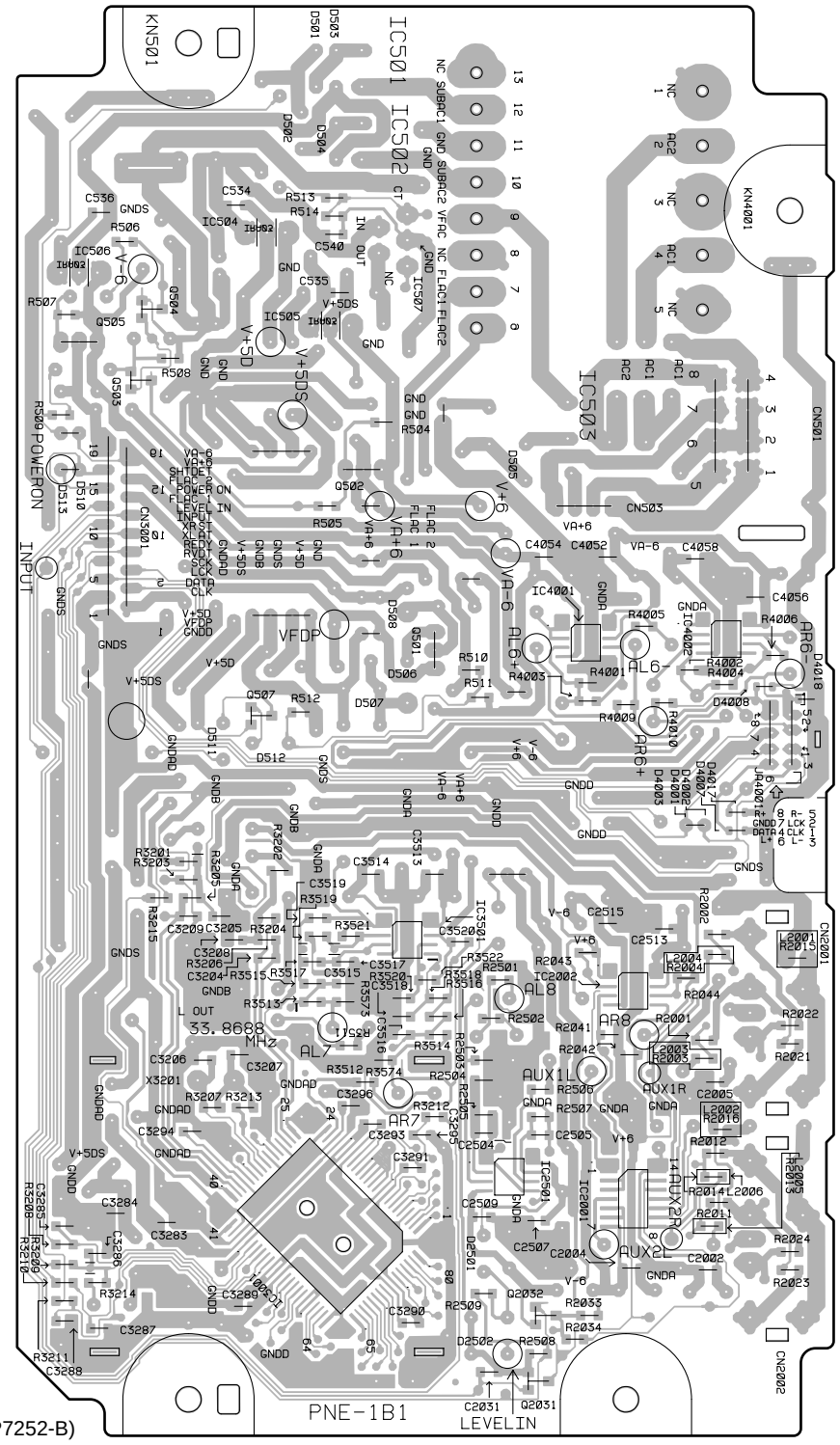
C DISPLAY ASSY



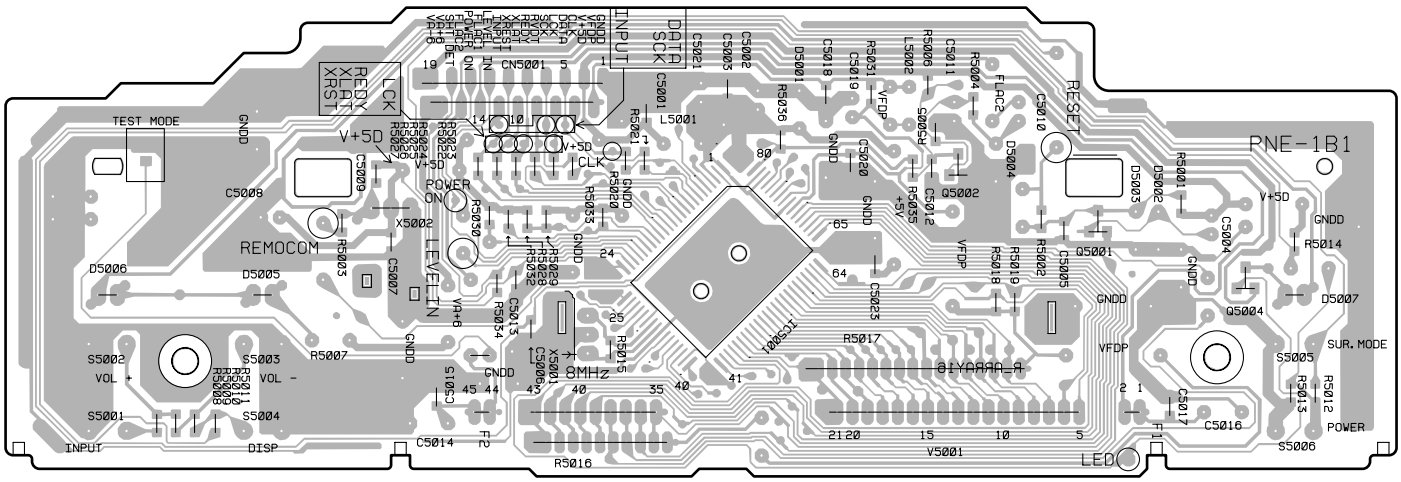
(ANP7252-B)

SIDE A

A MAIN ASSY


PNE-1B1
IC501
IC502
IC503
IC504
IC505
IC506
IC507
IC4001
IC4002
IC3501
IC2002
IC3001
IC2501
IC2001
Q504
Q507
Q2032
Q2031
Q2501
Q2502
Q4001
Q4002
Q4003
Q4004
Q4005
Q4006
Q4007
Q4008
Q4009
Q4010
Q4011
Q4012
Q4013
Q4014
Q4015
Q4016
Q4017
Q4018
Q4019
Q4020
Q4021
Q4022
Q4023
Q4024
Q4025
Q4026
Q4027
Q4028
Q4029
Q4030
Q4031
Q4032
Q4033
Q4034
Q4035
Q4036
Q4037
Q4038
Q4039
Q4040

C DISPLAY ASSY



(ANP7252-B)

IC5001 Q5002 Q5004

SIDE B

5. PCB PARTS LIST

NOTES: ●*Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
●*The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
●*When ordering resistors, first convert resistance values into code form as shown in the following examples.*
Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

560 Ω	→	*56×10^1*	→	*561*	..... *RD1/4PU 5 6 1 J*
47k Ω	→	*47×10^3*	→	*473*	..... *RD1/4PU 4 7 3 J*
0.5 Ω	→	*R50*			..... *RN2H R 5 0 K*
1 Ω	→	*1R0*			..... *RS1P 1 R 0 K*

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k Ω	→	*562×10^1*	→	*5621*	..... *RN1/4PC 5 6 2 1 F*

Mark	No.	Description	Part No.

LIST OF ASSEMBLIES

	COMPLEX ASSY	AWM7369
	├ MAIN ASSY	AWU7071
	├ TERMINAL ASSY	AWU7072
	└ DISPLAY ASSY	AWU7070

A MAIN ASSY

SEMICONDUCTORS

⚠	IC501,IC502(630mA)	AEK7006
⚠	IC503(200mA)	AEK7023
⚠	IC507	BA05ST
	IC2001	BU4066BCF
	IC3001	CXD2724Q
	IC2002,IC2501,IC3501,IC4001	NJM4558MD
	IC4002	NJM4558MD
⚠	IC504	NJM7805FA
⚠	IC505	NJM7806FA
⚠	IC506	NJM7906FA
⚠	Q501	2SB1237X
	Q2031	DTA124EK
	Q2032	DTC124EK
⚠	D501-D505	11ES2
	D2501,D506	1SS254
	D507	MTZJ27D
	D2502	MTZJ4.3B
	D4001-D4003	MTZJ8.2B
	D508	MTZJ9.1C
	D4007,D4008,D4017,D4018	UDZS8.2B

COILS

	L2001,L2002	DTL1019
	L2501	LAU1R0J
	L3203	LFA220J
	L3202	LFA6R8J
	L501	VTH1024

TRANSFORMER

⚠	T2	ATT7025

CAPACITORS

	C500(0.01μF,AC250V)	ACG1005
	C2005,C3285-C3288,C3295	CCSQCH101J50
	C3206,C3207	CCSQCH120J50
	C3204,C3209	CCSQSL101J50
	C3517-C3520	CCSQSL331J50
	C2001,C2003,C4001,C4002	CEAT100M50
	C4011,C4012,C504-C506,C509	CEAT100M50
	C503	CEAT101M63
	C501	CEAT222M25
	C502	CEAT331M25
	C2502,C3201-C3203,C3523	CEAT470M25
	C3524	CEAT470M25
	C511	CEAT470M25
	C507,C508	CEAT470M50
	C3282,C3292	CEAT471M6R3
	C2503,C3511,C3512,C3521	CEAT4R7M50
	C3522	CEAT4R7M50
	C2501	CEATR10M50
	C2031,C3296,C3515,C3516	CKSQYB102K50
	C3205,C3208	CKSQYB331K50
	C2002,C2004,C2507,C2509	CKSQYF103Z50
	C3283,C3284,C3289-C3291	CKSQYF103Z50
	C3293,C3294,C3513,C3514	CKSQYF103Z50
	C534-C536	CKSQYF103Z50
	C540	CKSQYF104Z50

RESISTORS

	R503	RD1/4PU223J
	R4003-R4006	RS1/10S1002F
	R502	RS1LMF122J
	Other Resistors	RS1/10S□□□J

OTHERS

	CN2001,CN2002 4P PIN JACK	AKB7015
	CN501 8P CONNECTOR	AKP7026
	X3201 CRYSTAL RESONATOR (33.8688MHz)	ASS7000
	CN3001 FFC CONNECTOR 19P	HLEM19S-1
	CN503 4P SOCKET	KP250NA4
	JA4001 I/O JACK	VKN1070
	KN4001,KN501 EARTH METAL FITTING	VNF1084

Mark	No.	Description	Part No.

B TERMINAL ASSY

OTHERS

	CN203	4P PLUG	KM250NA4L
	KN201	SCREW PLATE	VNE1948

C DISPLAY ASSY

SEMICONDUCTORS

	IC5001		PDG221A
	Q5001,Q5004		DTC143EK
	D5002		1SS254
	D5003		MTZJ6.8B
	D5005-D5007		SLP6118C51H

COIL

	L5001		LAU220J

SWITCHES

	S5001-S5006		ASG1034

CAPACITORS

	C5004		CEJA100M25
	C5002,C5008		CEJA101M10
	C5023		CKSQYB472K50
	C5001,C5003,C5007,C5013		CKSQYF103Z50
	C5006		CKSQYF104Z50

RESISTORS

	R5017		RA15T473J
	R5016		RA9T473J
	R5007		RD1/4PU821J
	Other Resistors		RS1/10S□□□J

OTHERS

	V5001	FL TUBE	AAV7052
	X5001	CERAMIC RESONATOR (8MHz)	DSS1053
	X5002	REMOTE RECEIVER UNIT	GP1U28X
		FL HOLDER	VNF1085
	CN5001	FFC CONNECTOR 19P	XKP3019

6. ADJUSTMENT

There is no information to be shown in this chapter.

7. GENERAL INFORMATION

7.1 PARTS

7.1.1 IC

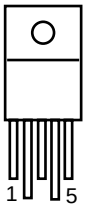
• The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

■ BA05ST (MAIN ASSY : IC507)

• Regulator IC

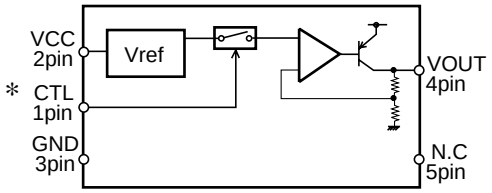
●Pin Assignment

Top Vew



1 pin:CTL
2 pin:VCC
3 pin:GND
4 pin:VOUT
5 pin:N.C

●Block Diagram



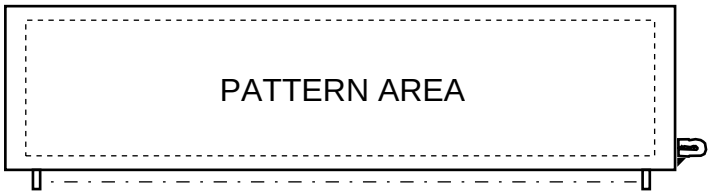
* CTL (1pin)

CTL terminal voltage	Output
More than 2.0V	ACTIVE
Less than 0.8V	OFF

7.1.2 DISPLAY

■ AAV7052 (DISPLAY ASSY : V5001)

• FL TUBE

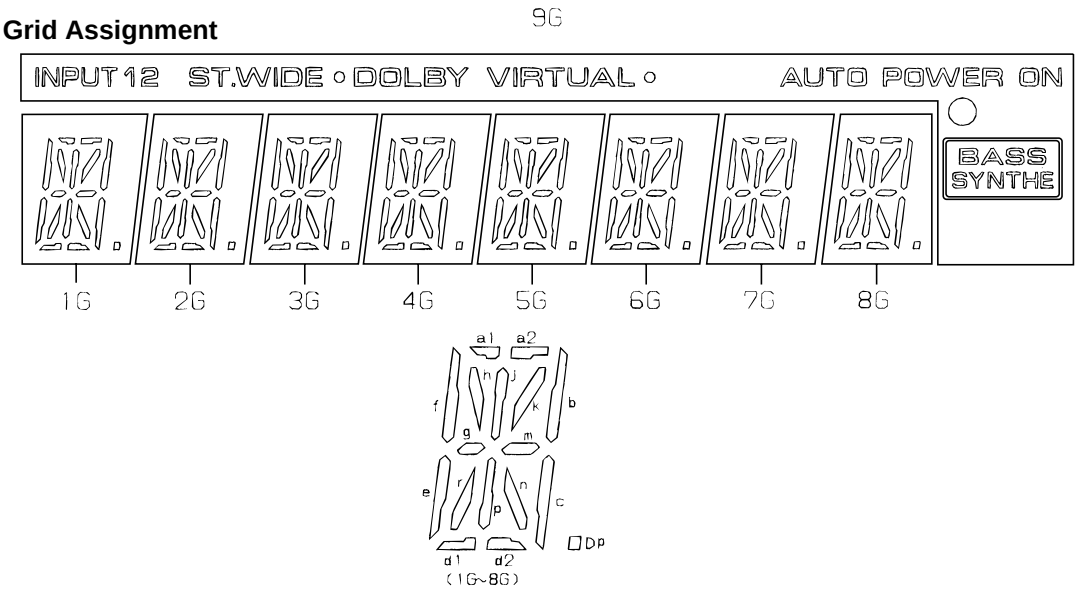


• Pin Connection

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
CONNECTION	F1	F1	NP	NP	P7	P6	P5	P4	P3	P2	P1	P0	P9	P8	P7	P6	P5	P4	P3	P2	P1	P0	NX	NX	NX	NX	NX	NX	NX	NX	NX	9G	8G	7G	6G	5G	4G	3G	2G	1G	NP	NP	F2	F2

NOTE 1) F1,F2 ---------- Filament
2) NP ----------No pin
3) NX ---------- No extend pin
4) DL ---------- Datum Line
5) 1G - 9G ---------- Grid

• Grid Assignment



• Anode Connection

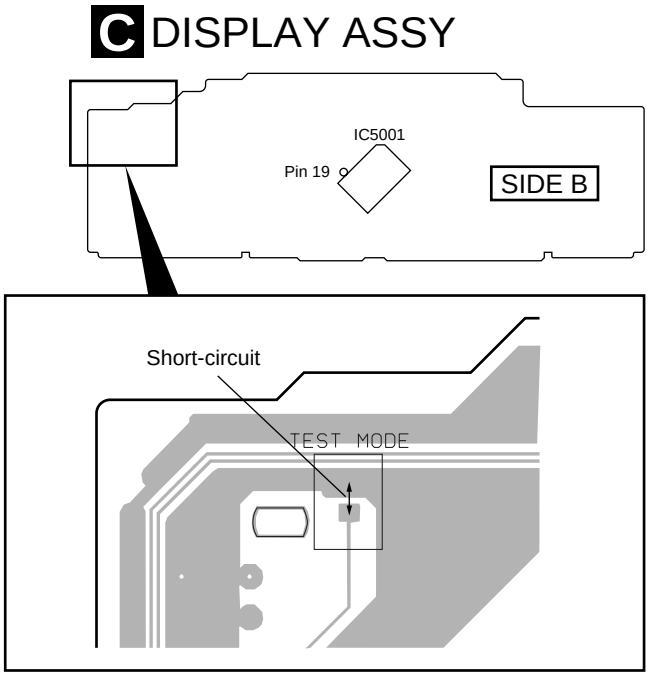
	1G - 8G	9G		1G - 8G	9G
P1	a1	INPUT	P10	c	BASS SYNTHE
P2	a2	1	P11	e	—
P3	h	2	P12	r	—
P4	j	ST.WIDE	P13	p	—
P5	k	○ DOLBY VIRTUAL ○	P14	n	—
P6	b	AUTO	P15	d1	—
P7	f	POWER	P16	d2	—
P8	m	ON	P17	Dp	—
P9	g	○			

7.2 TEST MODE

7.2.1 TEST MODE

7.2.1.1 How to Enter the Test Mode

Even that is possible though there are the following two methods.
(1) Receive "A55F" command with the remote control unit.
(2) Short-circuit the TEST MODE points on the foil side (pin 19 of IC5001 and ground) of the DISPLAY Assy. Plug the power cord into the AC socket.



- When the test mode is entered, FL displays with "TEST 1" for 1 second.
- LED keeps going on and off in the Test Mode.
- At this time, the setting of VOLUME becomes 10.
- SURROUND mode becomes DOLBY VIRTUAL ON.

7.2.1.2 Test Mode Operation

FL Segment Check

Press the DISPLAY key → Switch the movement of (1) to (5) cyclically.
(1) All lighting the FL and LED
(2) All light-out the FL and LED
(3) (segment check 1) "ABCDEFGH" display
(4) (segment check 2) "IJKLMNOP" display
(5) Normal display

1. Check The AUTO STANDBY Function

(1) Press the INPUT key →
Turn the POWER off and it becomes AUTO STANDBY mode.
FL displays with "AUTO".
(It becomes the condition that it passes for three minutes during POWER ON with no signal.)

(2) Input the input signal to INPUT terminal →
AUTO POWER ON.
(It moves only when it is inputted to the selected INPUT terminal.)

2. DSP Check

Press the SURR. MODE key → Enter the DSP check mode.

DSP check mode

Outputs TEST TONE in the DOLBY VIRTUAL state.
Output repeatedly TEST TONE in order of LEFT → CENTER → RIGHT → SURROUND.
Confirm whether DSP moves normally at the time of the SURROUND output.

Press the SURROUND MODE key twice → Release the DSP check mode. FL and LED are normal display.

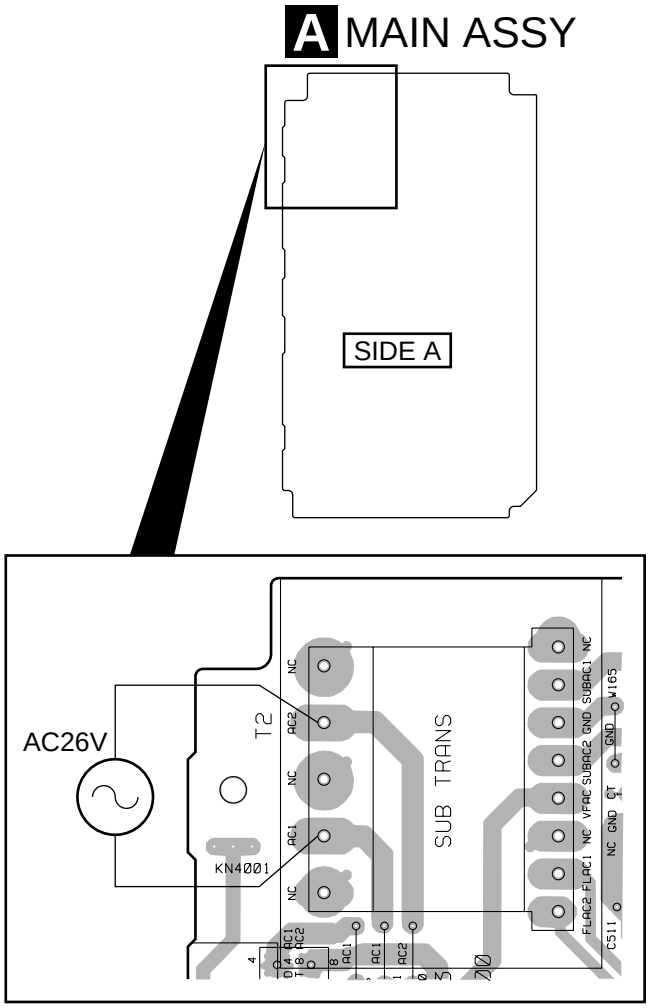
* A key except for the designation normally moves.

7.2.1.3 Release The Test Mode

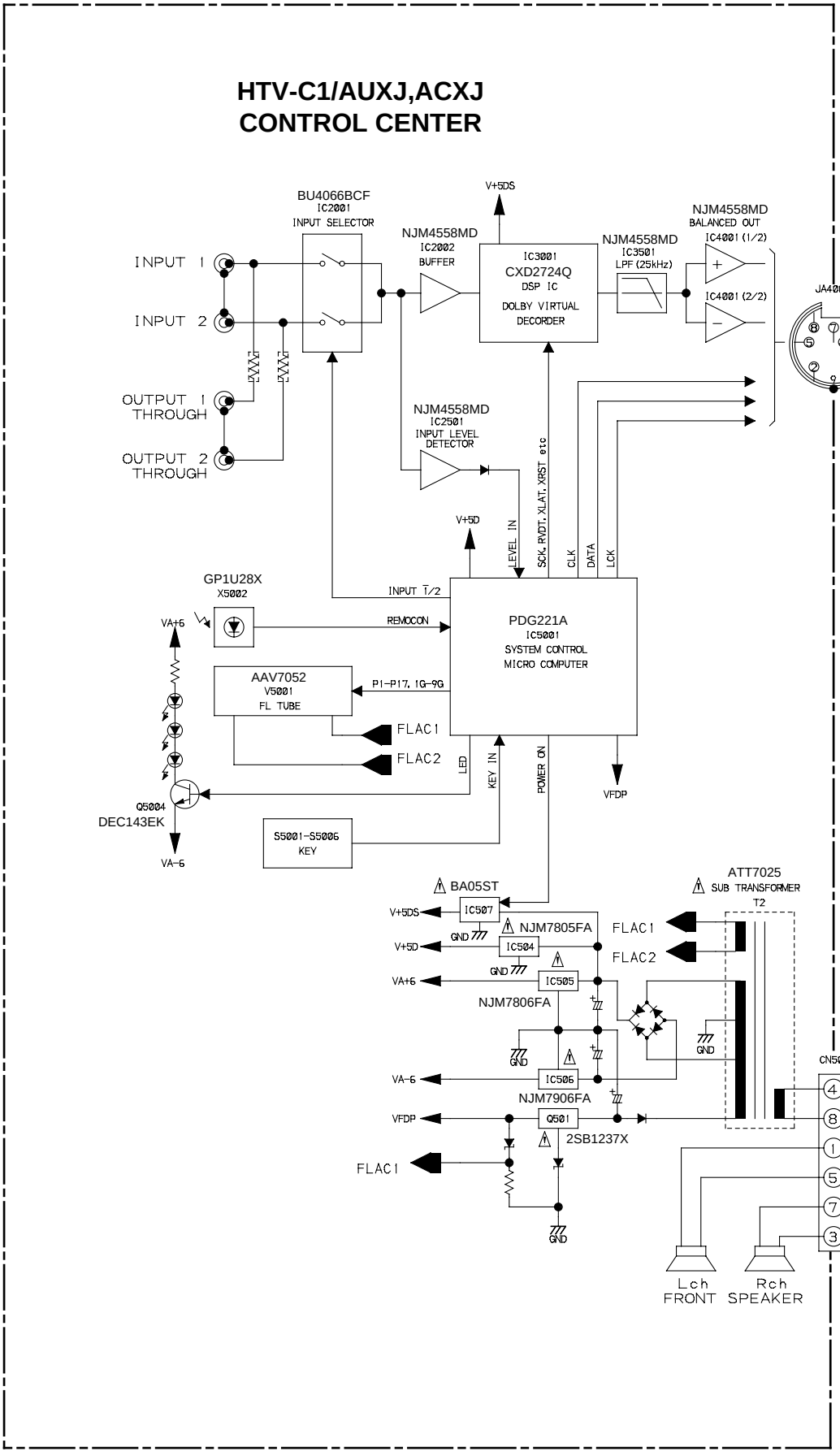
Turn the STAND BY/OFF key to OFF during the power on or unplug the power cord from the AC socket.

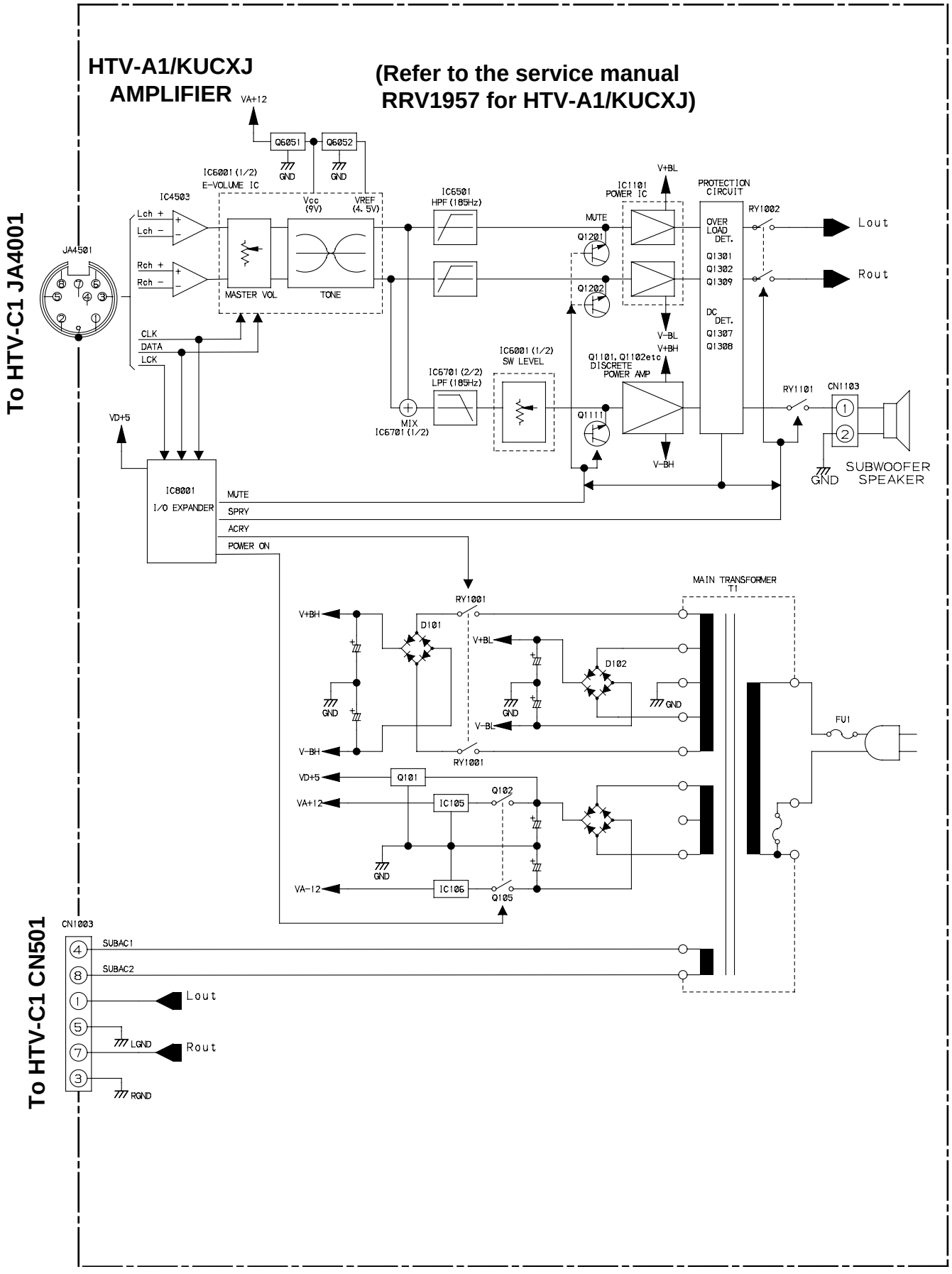
7.2.2 SINGLE OPERATION METHOD

HTV system doesn't move if it is not the combination of HTV-C1 and HTV-A1 fundamentally.
AC26V is added to the sub-transformer (T2) when the HTV-C1 is separate and you must diagnose it. (All the functions can't be validated.)



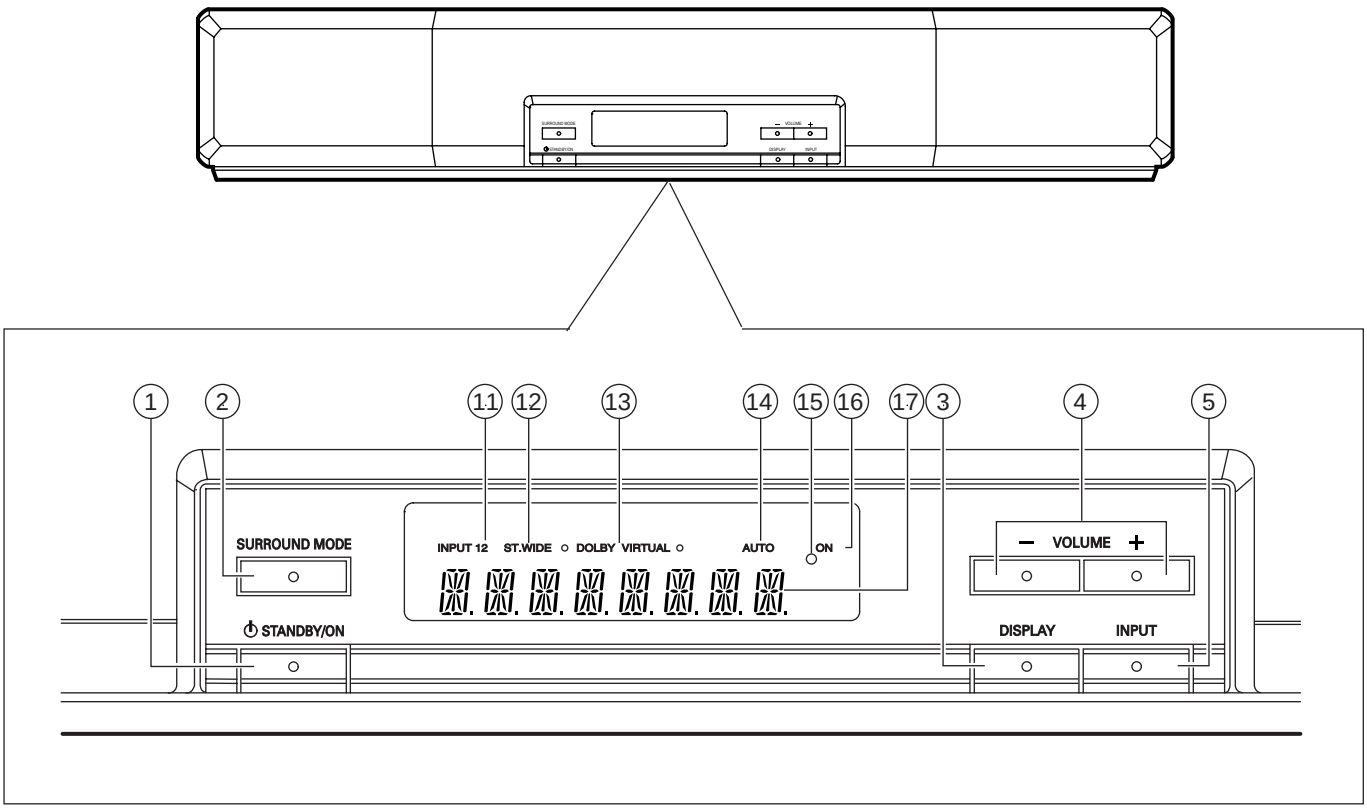
7.3 BLOCK DIAGRAM




HTV-A1/KUCXJ
AMPLIFIER
(Refer to the service manual
RRV1957 for HTV-A1/KUCXJ)
To HTV-C1 JA4001
To HTV-C1 CN501
VA+12
Q6051
Q6052
GND
IC6001 (1/2)
E-VOLUME IC
IC4503
Vcc
(9V)
VREF
(4.5V)
MASTER VOL
TONE
IC6501
HPF (185Hz)
IC1101
POWER IC
PROTECTION
CIRCUIT
OVER
LOAD
DET.
Q1301
Q1302
Q1309
DC
DET.
Q1307
Q1308
RY1002
Lout
Rout
MUTE
Q1201
Q1202
V-BL
V+BH
V+BL
JA4501
Lch +
Lch −
Rch +
Rch −
CLK
DATA
LCK
IC6001 (1/2)
SW LEVEL
IC6701 (2/2)
LPF (185Hz)
MIX
IC6701 (1/2)
Q1101, Q1102etc
DISCRETE
POWER AMP
Q1111
V-BH
RY1101
CN1103
SUBWOOFER
SPEAKER
VD+5
IC8001
I/O EXPANDER
MUTE
SPRY
ACRY
POWER ON
MAIN TRANSFORMER
T1
RY1001
D101
D102
V+BH
V-BH
V+BL
V-BL
FU1
Q101
Q102
IC105
IC106
Q105
VD+5
VA+12
VA-12
CN1003
SUBAC1
SUBAC2
Lout
LGND
Rout
RGND

8. PANEL FACILITIES AND SPECIFICATIONS

Control Center



① ⏻ STANDBY/ON switch

Turns the power ON/OFF (Standby).

Auto Standby Function

The unit is equipped with a function that will automatically turn the power ON/OFF (Standby) according to the presence or absence of an input signal.

- When the power is ON, the AUTO indicator will be illuminated. Standby status will automatically be engaged if there is no input signal for 5 minutes.
- If the selected input terminal receives an input signal while the AUTO indicator is illuminated (Standby status is engaged), the power will automatically be turned ON.
- If power to the unit has been turned OFF (Standby status is engaged) using the STANDBY/ON button on either the unit or the remote control, Standby status will remain engaged even if the selected input terminal receives an input signal.

② SURROUND MODE button

Selects Surround Mode.

③ DISPLAY button

When pressed once, displays each setting in sequence for 2 seconds; when pressed again, switches to Dimmer Mode, changing the brightness of the display.

④ VOLUME+, – buttons

⑤ INPUT button

Selects the input device.

⑪ INPUT indicator

When the INPUT 1 terminal is selected, “1” is illuminated; when the INPUT 2 terminal is selected, “2” is illuminated.

⑫ ST.WIDE indicator

Lights up when Surround Mode is switched to “STEREO WIDE.”

⑬ DOLBY VIRTUAL indicator

Lights up when Surround Mode is switched to “DOLBY VIRTUAL.”

⑭ AUTO indicator

Lights up when Auto Standby status is engaged.

⑮ Standby indicator

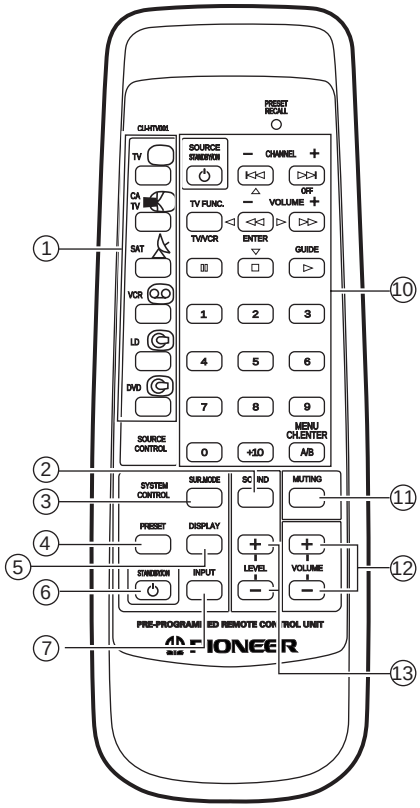
Lights up when the power is OFF (Standby status) . Goes out when the power is turned ON.

⑯ ON indicator

Lights up when the power is turned ON. This is the only indicator that will stay illuminated even when the Display is turned OFF.

⑰ Character display

Remote Control Unit



① SOURCE CONTROL buttons

Select the device to be operated.

② SOUND button

Selects the sound control function (BASS/TREBLE/BALANCE/S.W. LEVEL/EFFECT).

③ SUR.(surround) MODE button

Selects Surround Mode.

④ PRESET button

To preset other brand devices, press any one of the SOURCE CONTROL buttons together with this button.

⑤ DISPLAY button

When pressed once, displays each setting in sequence for 2 seconds; when pressed again, switches to Dimmer Mode, changing the brightness of the display.

⑥ ⏻ STANDBY/ON button

Turns the Home Theater System power ON/OFF (Standby).

⑦ INPUT button

Selects the input device.

⑩ Other device operation buttons

Select the device to be operated with the SOURCE CONTROL buttons and then operate the device.

⑪ MUTING button

Press to mute the volume.

⑫ VOLUME +,– button(s)

Use to adjust the volume.

⑬ LEVEL +,– button(s)

Use to adjust the sound control mode selected with the SOUND button.

■ SPECIFICATIONS

Input (Sensitivity/Impedance)
INPUT 1, 2 ..... 200 mV/22 kΩ

Speaker Section
Front L/R ..... 8.7 cm cone type

Miscellaneous
Dimensions
Control center ..... 610 (W) × 110 (H) × 166 (D) mm
24-3/16 (W) × 4-5/16 (H) × 6-9/16 (D) in
Weight (without package)
Control center ..... 3.8 kg (8 lb 6 oz)

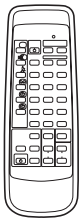
Furnished Parts
System cable A 1
System cable B 1
Audio cord 1
Mount kit 1
Dry Cell Batteries (AA/R6P) 2
Remote Control Unit 1
Operating Instructions 1
Warranty card 1

NOTE:
Specifications and the design are subject to possible modifications without notice, due to improvements.

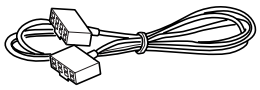
Manufactured under license from the Dolby Laboratories.
DOLBY and the double-D symbol ⧫⧫ are trademarks of Dolby Laboratories.

Checking Accessories (These parts are included in the accessory box.)

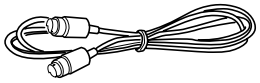
• Remote control unit (AZN7713)



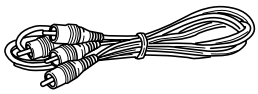
• System cable A (ADX7239) (L=3.0m)



• System cable B (ADE7023) (L=3.0m)



• Audio cord (VDE1033) (L=1.5m)



• Operating instructions
• Warranty card
• Quick instructions guide

• Mount kit (AEA7021)